## **AMENDMENTS**

## In the Claims

Please amend the claims as follows:

1-259. (Cancelled)

260. (currently amended) An in vivo method of delivering a pharmaceutical composition to a target polynucleotide comprising administering to the airways of a subject said pharmaceutical composition of a respirable or inhalable particle size of about 0.5 μm to 500 μm in size comprising [a nucleic acid that comprises] at least one oligonucleotide effective to alleviate hyper-responsiveness to adenosine or increased levels of adenosine, or to alleviate bronchoconstriction, asthma, or lung allergy, wherein the oligonucleotide is 4 to 60 nucleotides long and comprises [10%] 15% or less adenosine, wherein said oligonucleotide is antisense to a gene encoding an adenosine receptor associated with bronchoconstriction, and selected from the group consisting of genes encoding an adenosine A<sub>1</sub> receptor, adenosine<sub>2b</sub> receptor or adenosine A<sub>3</sub> receptor.

Claim 261 (Cancelled).

- 262. (previously presented) The method of claim 260, wherein the oligonucleotide comprises [5%] 10% or less adenosine.
- 263. (previously presented) The method of claim 262, wherein the oligonucleotide comprises 3% or less adenosine.
- 264. (previously presented) The method of claim 263, wherein the oligonucleotide is adenosine-free.
  - 265. (previously presented) The method of claim 260, wherein the oligonucleotide is 9



to 51 nucleotides long.

- 266. (previously presented) The method of claim 265, wherein the oligonucleotide is 18 or 21 nucleotides long.
- 267. (previously presented) The method of claim 260, wherein the pharmaceutical composition is administered by inhalation directly to the airway or lung of the subject.
- 268. (previously presented) The method of claim 260, wherein the oligonucleotide is antisense to the initiation codon, the coding region or the 5' or 3' intron-exon junction of a gene encoding a [protein] an adenosine receptor associated with bronchoconstriction, and selected from the group consisting of genes encoding an adenosine A<sub>1</sub> receptor, adenosine<sub>2b</sub> receptor or adenosine A<sub>3</sub> receptor and it is associated with hyper-responsiveness to adenosine, hyper-responsiveness to increased levels of adenosine, hyper-responsiveness to increased levels of an adenosine receptor, bronchoconstriction, asthma, lung allergy, or lung inflammation, or is antisense to the corresponding mRNA thereof.



- 269. (previously presented) The method of claim 260, wherein the particle size is about 0.5 μm to about 10 μm in size.
- 270. (previously presented) The method of claim 260, wherein the particle size is 10  $\mu$ m to 500  $\mu$ m in size.
- 271. (previously presented) The method of claim 260, wherein the pharmaceutical composition further comprises a surfactant.
- 272. (currently amended) The method of claim 260, wherein the hyper-responsiveness to adenosine, hyper-responsiveness to increased levels of adenosine, hyper-responsiveness to increased levels of an adenosine receptor, [bronchoconstriction] bronchoconstriction, asthma, lung allergy, or lung inflammation is associated with allergy, chronic obstructive pulmonary

disease, asthma, acute respiratory distress syndrome, respiratory distress syndrome, or a side effect of adenosine administration.

- 273. (previously presented) The method of claim 260, wherein the nucleic acid is administered in an amount of about 0.005 to about 150 mg/kg body weight.
- 274. (previously presented) The method of claim 260, wherein said method is a prophylactic or therapeutic method.
- 275. (previously presented) The method of claim 260, wherein the oligonucleotide is antisense to the initiation codon, the coding region or the 5' or 3' intron-exon junctions of a gene encoding an adenosine  $A_1$  receptor, adenosine  $A_{2b}$  receptor or adenosine  $A_3$  receptor.
- 276. (currently amended) An in vivo method of delivering a pharmaceutical composition to a target polynucleotide comprising administering to the airways of a subject said pharmaceutical composition of a respirable or inhalable particle size of about 0.5 µm to 500 µm in size comprising [a nucleic acid that comprises] at least one oligonucleotide, wherein the oligonucleotide comprises the sequence of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEO ID NO: 7 to SEQ ID NO: 966, or SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 7 to SEQ ID NO: 966, wherein at least one mononucleotide is linked or modified by one or more of phosphorothioate, phosphorodithioate, methylphosphonate, phosphoramidate, boranophosphate, phosphotriester, formacetal, 2'-O-methyl, thioformacetal, 5'-thioether, carbonate, 5'-N-carbamate, sulfate, sulfonate, sulfamate, sulfonamide, sulfone, sulfite, sulfoxide, sulfide, hydroxylamine, methylene (methylimino) and methyleneoxy (methylimino), terminal 1,3propanediol, terminal dodecanol, 2'-0-methoxyethyl, C-5-propynyl pyrimidine, C-5 methyl cytidine, C-5 ethynyl pyrimidine, 2' propoxy, C-18 amine, N3'-P5 phosphoramidates, 3'alkylamino, 2'-fluoro pyrimidine, 5-fluoro pyrimidine, 5-iodo pyrimidine, 5-bromo pyrimidine, 2'-borano, C-5 hexynyl pyrimidine, 2'-O-(2-methoxy)ethyl, 2'-O-aminopropyl, 5-(phenylethyl) or a peptide nucleic acid interbase linkages or conjugated to a polyethylene glycol, cholesterol, cholesteryl, dehydroepiandrosterone, dehydroepiandrosterone sulfate, dehydroepiandrosterone



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sulfatide, ubiquinone, dolichol, poly L-lysine, sulfatidic acid or a fatty acid.